

IN THE CLAIMS

- 1 1. (previously presented) An electrical apparatus comprising an actuator including at least two permanent magnets (1, 1a) and at least one electrical coil (2) which is movably supported by means of a swing arm (3), which coil is arranged to be traversed by magnetic fields of the permanent magnets (1, 1a), the actuator having a cage (4), which encloses the coil (2) and the permanent magnets (1, 1a), as a closed magnetic return path, further comprising means for exerting a permanent return force for the excursions of the swing arm.
- 1 2. (original) An electrical apparatus as claimed in claim 1, characterized in that the cage (4) is made of soft-iron or steel and is shaped so as to shield the magnetic stray fields of the magnets (1, 1a).
- 1 3. (previously presented) An electrical apparatus as claimed in claim 1, characterized in that the swing arm (3), which is secured to the coil (2) is supported on a pivot (5), and the pivot (5) is arranged at an inner side of the permanent magnets (1, 1a), which are sector-shaped.
- 1 4. (original) An electrical apparatus as claimed in claim 1, characterized in that the swing arm (3), which is supported on a pivot (5), is preloaded with respect to a housing (8) by means of a torsion spring (6).
- 1 5. (original) An electrical apparatus as claimed in claim 1, characterized in that

2 the swing arm (3) is preloaded with respect to a housing (8) by means of at least one blade spring
3 (12).

1 6. (previously presented) An electrical apparatus comprising

2 • a swing arm;
3 • at least two permanent magnets;
4 • at least one electrical coil, movably supported by the swing arm, which coil is
5 arranged to be traversed by magnetic fields of the permanent magnets; and
6 • a cage, enclosing the coil and the permanent magnets, which cage acts as a closed
7 magnetic return path,

8 characterized in that

9 • the permanent magnets are sector shaped;
10 • the apparatus comprises at least first and second swing arms;
11 • at least a second pivot (11) is arranged at the outer side of the sector-shaped
12 permanent magnets (1, 1a), and
13 • at least one pivotal joint (9) is present, which pivotal joint couples the first swing
14 arm (3) supported on a first pivot (5) and the second swing arm (10) supported on the
15 second pivot (11) in a pivotable manner and so as to be slidable with respect to one
16 another, the pivots (5, 11) being secured to a housing (8).

1 7. (previously presented) An electrical apparatus comprising

2 • a swing arm;
3 • at least two permanent magnets;

4 • at least one electrical coil, movably supported by the swing arm, which coil is arranged to
5 be traversed by magnetic fields of the permanent magnets;
6 • a cage, enclosing the coil and the permanent magnets, which cage acts as a closed
7 magnetic return path; and
8 • a point of attachment to a housing (8), where the swing arm (3) is attached by means of a
9 blade spring (12), so that the blade spring acts in lieu of a pivot.

1 8. (previously presented) An electrical apparatus comprising
2 • a swing arm;
3 • at least two permanent magnets;
4 • at least one electrical coil, movably supported by the swing arm, which coil is arranged to
5 be traversed by magnetic fields of the permanent magnets;
6 • a cage, enclosing the coil and the permanent magnets, which cage acts as a closed
7 magnetic return path;
8 characterized in that
9 the bounding surfaces of the cage (4), which would otherwise extend parallel to the plane of
10 oscillation of the coil (2), taper towards the side that is remote from the pivot (5), and the
11 bounding surfaces of the coil (2) and the magnets (1, 1a) are adapted accordingly.

1 9. (previously presented) An electrical apparatus comprising
2 • a swing arm;
3 • at least two permanent magnets;

4 • at least one electrical coil, movably supported by the swing arm, which coil is arranged to
5 be traversed by magnetic fields of the permanent magnets;
6 • a cage, enclosing the coil and the permanent magnets, which cage acts as a closed
7 magnetic return path;
8 characterized in that the cage (4) comprises, at its side that is remote from the pivot (5), a
9 shielding wall having an opening (4a) in the area of the magnets (1, 1a).

1 10. (original) An electrical apparatus as claimed in any one of the claims 1 through 9,
2 characterized in that the electrical apparatus is an electrically driven shaving apparatus.

1 11. (previously presented) An electrically driven shaver comprising a shaver actuator, the
2 actuator comprising:
3 • a swing arm;
4 • at least two permanent magnets;
5 • at least one electrical coil, movably supported by the swing arm, which coil is arranged to
6 be traversed by magnetic fields of the permanent magnets; and
7 • a cage, enclosing the coil and the permanent magnets, which cage acts as a closed
8 magnetic return path.

12. (previously presented) The apparatus of claim 1, wherein there is only a single swing arm.

1 13. (previously presented) The apparatus of claim 12, further comprising:
2 a housing; and

3 a pivot; and

4 wherein:

5 - the coil is mounted on the swing arm;

6 - the swing arm is fixed to a pivot; and

7 - the pivot is mounted on the housing outside the cage.

14. (previously presented) The apparatus of claim 13, wherein the swing arm is adapted to drive a load on an end of the swing arm that is remote from the coil.

1 15. (previously presented) The apparatus of claim 13, wherein

2 - the permanent magnets are sector shaped; and

3 - the apparatus further comprises a load to be driven by the swing arm, which load is
4 outside the sector shaped magnets.

16. (previously presented) The apparatus of claim 1, wherein the permanent magnets are sector shaped.

17. (new) The apparatus of claim 9, wherein the wall is perpendicular to a plane on in which the arm swings.

18. (new) The apparatus of claim 1, wherein the means for exerting a permanent return force comprises a single spring.

19. (new) The apparatus of claim 6, wherein the first pivot point is at an opposite side of the sector-shaped magnet from the second pivot point.